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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,572	07/30/2008	Hitoshi Moritani	2006_0147A	4847

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EXAMINER

MCCALL, ERIC SCOTT

ART UNIT	PAPER NUMBER
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2855

NOTIFICATION DATE	DELIVERY MODE
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06/24/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/573,572	Applicant(s) MORITANI ET AL.	
	Examiner Eric S. McCall	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>Mar. 27, 2006</u> . | 6) <input type="checkbox"/> Other: ____. |

TEST EQUIPMENT OF ENGINE MOTORING

FIRST OFFICE ACTION

DRAWINGS

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the reference sign “44” which is not mentioned in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

ABSTRACT

The Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because of the use of the legal phraseology "means" therein. Correction is required. See MPEP § 608.01(b).

SPECIFICATION

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The Applicant's cooperation is requested in correcting any errors of which the Applicant may become aware of in the specification.

CLAIMS

35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

With respect to claim 1, the word “can” is indefinite in the phrase “a coupling mechanism that directly couples an electrical motor to a crank shaft of the engine and *can* detect a drive torque” as to whether the torque is actually detected.

With respect to claim 6, the phrase “that is able to be connected” is indefinite as to whether the connecting pipe is connected to the intake pipe and whether the pressing rod is present.

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2855

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olschefski (4,730,484) in view of Scourtes (5,417,109).

With respect to claim 1, Olschefski sets forth test equipment of engine motoring comprising:

- a conveying mechanism (12) that carries in and carries out an engine to and from a test position (14);

- a fixing mechanism that fixes the engine carried into the test position (Fig. 1);

- a coupling mechanism (28) that directly couples an electrical motor (18) to a crank shaft (72) of the engine;

- an encoder (20) that generates a pulse signal as an operating standard in synchronism with rotation of the electrical motor;

- a plurality of detection units (40 & 42) that are driven to reciprocate so as to be connected to and disconnected from *or approach and separate from the engine* positioned at the test position and detect a plurality of operating state quantities;

- a control means for controlling operations of the electrical motor (18), the conveying mechanism (12), the fixing mechanism (Fig. 1), the coupling mechanism (28), and the plurality of detection units (40 & 42); and

a judging means (23) for judging whether the engine is normal by comparing information obtained by the plurality of detection units with standard information obtained in advance.

Although the claimed coupling mechanism is not required to detect a drive torque, Olschefski fails to set forth that the coupling mechanism (28) *can* detect a drive torque.

However, the Applicant's admitted prior art of Scourtes does set forth the use of a coupling mechanism (27) which can detect a drive torque.

As such, it would have been obvious to one having ordinary skill in the art armed with said teachings to use the coupling mechanism of Scourtes with the test equipment of Olschefski.

The motivation being the ability to monitor the torque that the electric motor is applying to the engine, if desired, since the motor is applying a torque to the engine in order to test the engine so that consistent testing may be achieved.

With respect to claim 2, Olschefski sets forth the engine being "carried-in" by the conveying mechanism and the control means testing the said engine.

The Examiner points out that the Applicant's claimed language "to be" in the phrase "to be carried-in" does not require the engine being carried-in and thus the control means setting the test mode.

With respect to claim 4, Olschefski sets forth detection units (40 & 42) which detect a vibration level and a rotation phase of a crank shaft during engine testing.

Art Unit: 2855

With respect to claim 5, Olschefski sets forth that each of the plurality of detection units includes a detector (40 & 42) that detects an operating state quantity of an engine positioned at the test position and a drive mechanism (26) that drives reciprocally the detector so as to make the detector approach and separate from an inspecting portion of the engine.

With respect to claim 6, Scourtes sets forth an intake pressure detection unit (45) that detects an intake pressure and includes a connecting pipe that is *able to be* connected to and disconnected from an intake pipe of the engine.

The Examiner points out that the claim language does not required the connecting pipe to be connected to the intake pipe and thus does not require the pressing rod to open a throttle valve disposed inside the intake pipe.

With respect to claim 7, Scourtes sets forth an exhaust pressure detection unit that detects an exhaust pressure includes an exhaust pipe (C1-C8) that guides air exhausted from the engine, a throttle portion (R1-R8) provided inside the exhaust pipe, and a detector (P1-P8) that is disposed at a more upstream side than the throttle portion and detects an exhaust pressure.

With respect to claim 9, Olschefski sets forth a detection unit (40 & 42) that detects a noise level as claimed.

Art Unit: 2855

With respect to claim 11, Olschefski fails to set forth a clamp that clamps a flange portion of the engine block at the engine test position as claimed.

However, it would have been obvious to one having ordinary skill in the art armed with said teaching to clamp the engine block into a fixed position during the engine test.

The motivation being so that the engine does not move during the testing so that accurate test results are obtained.

Allowable Subject Matter

Claims 3, 8, 10, and 12 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims because the prior art fails to teach or suggest the claimed subject matter of each of the respective claims.

CITED DOCUMENTS

The Applicant's attention is directed to the "PTO-892" form for the prior art made of record at the time of this office action.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Eric S. McCall/
Primary Examiner
Art Unit 2855